

## **REMARKS**

Prior to this Reply, Claims 1-35 were pending. Through this Reply, Claims 1, 3-5, 7, 12, 17, 18, 23, 26 and 28-30 have been amended. No claims have been added or cancelled. Accordingly, Claims 1-35 are now at issue in the present case.

### **I. Office Action Summary**

Applicants note an apparent difference between page 1 of the Office Action (“Office Action Summary”) and pages 2-6 (“Detailed Action”). Page 1 indicates that “Claim(s) 1-29 is/are rejected” and “Claims(s) 31-35 is/are objected to.” However the “Detailed Action” includes an objection to Claims 4, 5, 7, 17, 26, 28 and 29 and a rejection of Claims 1-6, 9-29 and 31-35 (grouped as Claims 1, 2, 6, 9-12 and 15-17; Claims 3-5 and 13-14; and, Claims 18-29 and 31-35). As discussed below, Claim 30 was also objected to as dependent on a rejected base claim. Claims 7 and 8 do not appear to be addressed in the “Detailed Action.” Because the “Detailed Action” includes a statement of the basis for the rejections and objections, the following remarks are based on the “Detailed Action.”

### **II. Allowable Claims**

#### **A. Claim 30**

Claim 30 was objected to as being dependent upon a rejected base claim. The Examiner indicated that Claim 30 would be allowable if rewritten in independent form to include all of the limitations of its base claim and any intervening claims. Claim 30 has been so rewritten, and is now believed to be in allowable form.

**B. Claims 7 and 8**

Although Claims 7 and 8 were included among the claims indicated as “rejected” in the Summary of the Office Action, they appear to be unaddressed in the “Detailed Action.” Because the Examiner has not provided a *prima facie* case for the rejection of Claims 7 and 8, Applicants can not provide any response to the rejection of Claims 7 and 8. Accordingly, it is believed these claims should be considered allowable (except, perhaps, for a requirement to place the claims in independent form).

**III. Claim Informalities**

The Examiner objected to Claims 4, 5, 7, 17, 26, 28 and 29, indicating that the word “about” should be deleted or the claims modified. Applicants do not believe the term “about,” in these claims, renders them indefinite or informal, particularly in view of the specification (see M.P.E.P. 2173.05(b)(A)). Nevertheless, “about” has been deleted from Claims 4 and 17, and, in Claims 5, 7, 26, 28 and 29, the phrase “about equal to” has been changed to “equal to about.”

**IV. Rejection Under 35 U.S.C. 102(b)**

The Examiner rejected Claims 1, 2, 6, 12 and 15-17 under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,016,124 to Fukushima, et al. (hereinafter “Fukushima”). Applicants respectfully traverse the rejection because it is believed that Fukushima (as understood by Applicants) fails to anticipate Claims 1, 2, 6, 12 and 15-17.

**A. Claims 1 and 12**

1. Fukushima fails to disclose a maximum current draw or start-up current which is *selected by the user*

Claims 1 and 12 have been amended to emphasize that the selection is made by a user. Support can be found at least at page 4, lines 10-11; page 5, lines 10-19; and, page 11, lines 20-22 of the present application.

The Examiner asserts (with regard to Claims 9-11) that:

Fukushima, et al. discloses a hardware switch/trigger button (Figure 1A item 96). . . [and] specifies maximum current draw selection by using a combination of the trigger button and systems controller (Figure 1A item 91). . . column 6 lines 49-55

However, as detailed below, even assuming Fukushima's trigger button is operated by a "user," such operation does not result in the user making a selection, as claimed in Claims 1 and 12. The claims include a "maximum current draw" or "maximum start-up current" which is *selected by a user*. In order for a user's operation of trigger 96 to constitute a "selection," it would be necessary that the amount of "maximum current draw" or "maximum start-up current" be different depending on how the user operates the trigger button 96. It is noted that the trigger button has two positions; however, in the system of Fukushima, the user's operation of button 96 does not allow the user to select a maximum current draw or start-up current.

According to Fukushima, in embodiment(s) in which the trigger button 96 is used, the amount of energy provided to the motor is controlled by the digital value provided to the D/A converter 89' (Col. 4, lines 26-35). For example, if an input of "1111" is applied to the D/A converter 89', a high amount of energy is provided to the motor, and if an input of "0100" is applied to the D/A converter 89' a relatively lower amount of energy is provided to the motor (Col. 9, lines 29-49). Fukushima does disclose sending different values to the D/A converter 89', but this is done in response to the *circuitry* automatically detecting whether the level of

voltage is available from the power supply (Col. 5, line 65 to Col. 6, line 15) or in response to whether the head 5 has already been shifted to a non-recorded position (Col. 6, lines 16-43). Since these items are not related to the position or operation of the switch 96, this does not constitute a *user selection*.

Referring to Figs. 2-3 (and corresponding text), when the trigger 96 is pushed to the first position, the system does some initial checks, including determining whether the head needs to be positioned to a non-recorded position, in which case “0100” is sent to the D/A/ converter, (to replace the (apparent) default start-up value of “1111”, Col. 6, lines 24-32)(*see*, Fig. 2, item S04’; and, Col. 6, line 49 to Col. 7, line 17). Thus, up to this point, any change in the value sent to the D/A converter is set in response to automatic detection circuitry, and is *not a user selection*. The remaining steps of Fig. 2 are performed without any change in the value sent to the D/A converter 89’. Fig. 4 illustrates another embodiment, but provides for the same type of changes to the value(s) provided to D/A converter 89’, i.e. *without a user selection* of maximum current draw or start-up current.

After the procedures of Fig. 2 or 4, the procedures of Fig. 3 are performed (S22 and ff. of Figs. 2 and 4). It is believed by Applicants that the maximum or start-up voltages or “energies” for the motor are provided according to Fig. 2 or 4, and that nothing that is shown in Fig. 3 discloses selecting a maximum current draw or start-up current (i.e. at most, discloses a recording, rather than a maximum or start-up current). However, it is believed that even if Fig. 3 is considered, Fig. 3 shows that any change in the value given to the A/D converter is *not a user selection*. If the user keeps the trigger at the first position, the system idles (S31 of Fig 3). If the user pushes the trigger further to the second position (and, thus, closes switch 95), subsequent steps of Fig. 3 are performed. At item S100, “1111” is applied to 89’. However, whether this is

a change from the previous value is dependent only on previous automatic detection steps (Col. 6 lines 24-43), and *can not be selected by the user*. Similarly at S103 “0100” is sent to 89’ if circuit 194 is “high.” Circuit 194 is the circuit which detects the voltage of the power supply (Fig. 1), and thus is not an item which is controlled by the trigger 96, and is an item which is *not selected by the user*.

Accordingly, it is seen that, while Fukushima discloses the potential to use different levels of energy or voltage, the level depends on automatic detection circuits and is out of the control of the user. Similarly, although Fukushima provides a trigger 96, the trigger 96 functions to turn on the power supply (at a first step) and turn on the recording switch (at a second step) (Col. 5, lines 6-10). There is believed to be no disclosure in Fukushima of using the trigger 96 to allow a *user* to select a maximum current draw or start-up current.

2. Fukushima discloses different values for motor voltage or energy, but does not disclose selecting current

Fukushima discloses lowering the *voltage* applied to the motor (Col. 7, line 16), and limiting the electric *energy* applied to the motor (abstract). It is believed that Fukushima fails to disclose selecting a *current* and, accordingly, fails to anticipate what is claimed in Claims 1 and 12.

**B. Claims 2, 6 and 15-17**

Claims 2, 6 and 15-17 are patentable at least as dependent, directly or indirectly, from Claims 1 or 12, and for other reasons as well. With regard to Claim 2, Fukushima fails to disclose a maximum current draw being equal to current drawn during seek operations. With regard to Claim 15, Fukushima fails to disclose the power supply being *incapable* of supplying more than the maximum normal operating current.

**V. Rejections Under 35 U.S.C. 103(a)**

**A. Claims 3-5 and 13-14**

The Examiner rejected Claims 3-5 and 13-14 under 35 U.S.C. § 103(a) as being unpatentable over Fukushima in view of U.S. Patent No. 5,381,279 to Dunn. Claims 3-5 and 13-14 are patentable at least as dependent from Claims 1 or 12.

**B. Claims 18 and 23**

The Examiner rejected Claims 18 and 23 (along with Claims 19-22, 24-29 and 31-35) under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,397,971 to McAllister in view of Fukushima.

The Examiner noted that “McAllister does not disclose a maximum current draw selector where it selects a maximum disk drive supply current and the maximum current draw by the disk drive does not exceed the selected maximum.” The Examiner relies on Fukushima to supply the deficiencies of McAllister.

Claims 18 and 23 have been amended in a manner similar to the amendments made to Claims 1 and 12. Accordingly, Claims 18 and 23 are patentable for reasons similar to those discussed above in connection with Claims 1 and 12.

**C. Claims 19-22, 24-29 and 31-35**

Claims 19-22, 24-29 and 31-35 are patentable at least as dependent from Claims 18 or 23.

It is believed the above comments establish patentability and Applicants do not necessarily accede to the assertions and statements in the Office Action, whether or not expressly addressed.

## VI. Additional Claim Fees

In determining whether additional claim fees are due, reference is made to the Fee Calculation Table (below).

**Fee Calculation Table**

	Claims Remaining After Amendment		Highest Number Previously Paid For	Present Extra	Rate	Additional Fee
Total (37 CFR 1.16(c))	35	Minus	35	= 0	x \$18 =	\$ 0.00
Independent (37 CFR 1.16(b))	5	Minus	4	= 1	x \$86 =	\$ 86.00


As set forth in the Fee Calculation Table (above), Applicant previously paid claim fees for thirty-five (35) total claims and for four (4) independent claims. The Commissioner is hereby authorized to charge Deposit Account No. 50-2198 in the amount of \$86.00 for the presentation of one (1) independent claim in excess of four (4). Applicant believes that no other fees are due. Nevertheless, the Commissioner is hereby authorized to charge Deposit Account No. 50-2198 for any fee deficiencies associated with filing this paper.

## VII. Conclusion

Applicant believes that the application appears to be in form for allowance. Accordingly, reconsideration and allowance thereof is respectfully requested.

The Examiner is invited to contact the undersigned at the below-listed telephone number regarding any matters relating to the present application.

Respectfully submitted,



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